rounded,  $\frac{1}{4}$  length of head; mouth small, subinferior, its width  $\frac{1}{4}$  length of head; a very distinct mental swelling; teeth small, notched, 5 or 6 in the upper jaw, 6 in the lower; nostrils midway between eye and end of snout, the anterior on a level with the centre of the former, the posterior on a level with its lower border; eye small,  $\frac{2}{5}$  length of snout,  $\frac{1}{3}$  interocular width. Dorsal 16-17, originating above fifth ray of anal, its length about  $\frac{1}{3}$  of its distance from the head. Anal 22-23, a little nearer root of caudal than base of ventral. Pectoral pointed, about  $\frac{3}{4}$  length of head, once and  $\frac{1}{2}$  length of ventral, not reaching base of latter. Caudal with pointed lobes. Caudal peduncle  $2\frac{1}{2}$  or  $2\frac{2}{3}$  times as long as deep, a little shorter than head. 68-70 scales in the lateral line,  $\frac{10}{17}$  in a transverse series on the body,  $\frac{9-10}{9-10}$  in a transverse series between dorsal and anal, 16 round caudal peduncle. Uniform brown, somewhat lighter beneath.

Total length 145 mm.

Two specimens from the Kribi River, Efulen, South

Cameroon, from Mr. G. L. Bates's collections.

Most nearly allied to M. sphecodes, Sauv., and M. brachistius, Gill. Distinguished from both by the number of scales round the caudal peduncle, which is less slender. This new species may be regarded as intermediate between M. brachistius and M. pauciradiatus, Stdr.

## VIII.—Description of a new Tree-Viper from Mount Ruwenzori. By G. A. BOULENGER, F.R.S.

## Atheris Woosnami.

Snout truncate at the end, with sharp canthus. Eye rather small. Rostral twice and a half to three times as broad as deep; head-shields sharply keeled, 8 to 10 across the crown from eye to eye; 12 to 15 scales round the eye; one or two series of scales between the eye and the labials; nasal entire or divided; 10 upper labials; three or four pairs of small chin-shields, anterior largest and in contact with three or four lower labials; gular scales smooth or very faintly keeled. Scales strongly keeled, in 25 to 30 rows. Ventrals 151 in males, 158-162 in females; anal entire; subcaudals 49-52 in males, 44-47 in females. Olive-green to bright grass-green above, usually with a dorsal series of

large black rhombs which may be confluent into a zigzag band; a lateral series of smaller black spots; a  $\Lambda$ - or A-shaped black marking on the top of the head, the point between the eyes; a black streak on each side of the head, from above the nostril to above the last labial shield; lower parts uniform yellowish or pale green; end of tail black or blackish.

Total length 630 mm.; tail 85.

Several specimens were obtained by Mr. R. B. Woosnam on the east side of Ruwenzori, between 6000 and 6500 feet altitude. This fine snake may sometimes be seen coiled up round the stem of elephant-grass 10 feet above the ground. It is viviparous.

This species is well characterized by its smaller eye, its sharp canthus rostralis, and its smooth or nearly smooth

gular scales.

## IX.—Alternation of Generations, Metamorphosis, and Direct Development. By W. Wedekind\*.

In my previous writings on the subject of parthenogenesis I have already pointed out that, in my opinion, so-called asexual reproduction was everywhere the primitive method, and that it is only in the course of phyletic development, through the series-segment, bud, spore, and female and male parthenoovum,-that at last the ovum needing fertilization and the sperm belonging to it have arisen therefrom. It follows, therefore, that all organisms with sexual reproduction must be derived from asexual ancestors. According to the biogenetic law of recapitulation this phylogeny must also very generally have been repeated in the ontogeny, and I would, moreover, venture to assume that in earlier epochs the course of the entire ontogeny was not yet by any means so rapid as it usually is to-day. It therefore follows from our theory that the ancestral stage of asexual reproduction must formerly have still been displayed in the development of each individual, and that it was only gradually that it became more and more suppressed.

According to this interpretation, then, in the first instance from every fertilized ovum at least an asexual generation must again have developed, and only from this has there arisen once more the ultimate form with sexual reproduction.

<sup>\*</sup> Translated by E. E. Austen from the 'Zoologischer Anzeiger,' Bd. xxix. Nos. 25/26 (March 6, 1906), pp. 790-795.